

ABSTRACT OF THE DISCLOSURE

This is an improvement in a fuel cell stack assembly having a plurality of plates with grooves for accommodating gaskets to provide seals between individual fuel cell plates in the fuel cell stack assembly in order to prevent leakage of gases and liquids required for operation of the fuel cell stack assembly. The improvement comprising grooves in each fuel cell plate in the fuel cell stack assembly with a circular or an elliptical profile, and a unitary seal formed of a sealing material between each fuel cell plate in the fuel cell stack assembly having a profile corresponding to the profile of the grooves in each fuel cell plate.